



RSI
INDUSTRIAL
PAINTS Inc.

POLYURETHANE TOPCOAT RPU-302

PRODUCT DESCRIPTION

RPU-302 is Polyurethane industrial flooring is based on Polyurethane resin and MDI isocyanate hardener. Due to its abrasion resistance, tensile strength, heat resistance, Chemical stability and more sunlight stability (Anti-UV) Compared to epoxy flooring it has widespread use in health centers, industrial environment, parkings and gyms.

Typical use of this product can be applied on different surfaces, walls and floors, especially for dust free floors. And it is appropriate for places with heavy traffic areas such as ramps, car parks, industrial environment, hospitals, manufacturing facilities, dairies and other health environments.

PHYSICAL PROPERTIES

Gloss Level	Gloss
Volume Solid	98±2%
Specific gravity	1.7±0.05 kg/liter
Theoretical spreading rate	1.9 m ² /liter at 500 mic. Dft.
Flash point	90 °C
V.O.C.	Max. 9 g/l
Shelf life	1 year (25°C) from time of production. Depending on storage condition, mechanical stirring may be necessary before usage. Storage environment should be ventilated and away from sunlight and high temperature (above 30 °C).

MIXING

Mixing ratio (by weight)	Component A: 5	Component B: 1
Pot life	45 min at 23 °C	

APPLICATION

Conditions	The temperature of the substrate should be minimum 10°C and at least 3°C above the dew point of the air, temperature and relative humidity measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying. The moisture content in the concrete should not exceed 4 % (by weight). The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.		
Method	Trowel or Squeegee: Appropriate for many types of surfaces	Roller: To avoid air bubbles, it is very important to pierce the coating with a spiked roller when desired film thickness is achieved.	Brush: Recommended for stripe coating and small areas
Indicated film thickness, dry	500-1000 microns		
Indicated film thickness, wet	510-1020 microns		

DRYING AND CURING TIMES

Condition	Drying times are generally related to air circulation, temperature, film thickness and number of coats, and will be affected correspondingly. The figures given in the table are typical with: * Good ventilation (Outdoor exposure or free circulation of air) * Typical film thickness * One coat on top of inert substrate
Substrate temperature	23 °C
Surface drying	4 hours
Deep drying	12 hours
Recoat interval min	16 hours
Recoat interval max	32 hours
Complete curing	7 days

APPLICATION AND CURING CONDITIONS

Surface preparation

The surface should be free of any contamination and the removal of glaze to maintain a lasting adhesion to the next product.

Laitance deposits are best removed by Planetary diamond disc grinder or by captive blasting followed by vacuum cleaning to remove dust debris. For old concrete, RSI technical team should visit the site and appropriate surface preparation methodology should be recommended and that is to be followed. This product should be apply on primed surface to achieve adhesion.

Substrate	Surface preparation	
	Minimum	Recommended
Coated surfaces	Clean, dry and undamaged compatible coating as per SSPC SP13/NACE NO 6 /ASTM D4258 -05 /ACI 503.6R97/SSPC-TR 5/ICRI TECHNICAL GUIDELINE 03741/NACE02203	Clean, dry and undamaged compatible coating as per SSPC SP13/NACE NO 6 /ASTM D4258 -05 /ACI 503.6R97/SSPC-TR 5/ICRI TECHNICAL GUIDELINE 03741/NACE02203

REMARKS

Preceding coat

Epoxy Mid coat such as REP-209

Subsequent coat

None.

Mixing

Depending on storage condition, mechanical stirring may be necessary before usage.

Film thickness

May be specified in another film thickness than indicated depending on purpose and area of use. This will alter spreading rate and may influence drying time and recoating intervals. Normal range is 500 - 1000 microns.

Thinning

The type and amount of thinner depend on application conditions, application method, temperature, ventilation, and substrate. Thinner RTH-105 is recommended in general.

Drying and curing time

Drying and curing times are determined under controlled temperatures and relative humidity below 85 %, and at average of the DFT range for the product.

Storage

The containers must be completely closed and kept in a dry, cool and well ventilated environment. Be careful not to have any heat source near the containers.

SAFETY

This product is intended for use of professional applicators. Applicators and operators shall use appropriate protection equipment when using this product. Use it in well ventilated environment and prevent direct contact with skin. Spillage on the skin should immediately be removed with suitable cleaner. Eye should be well flushed with water and medical cleaner.

RSI Co.

Product data sheet RPU-302

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